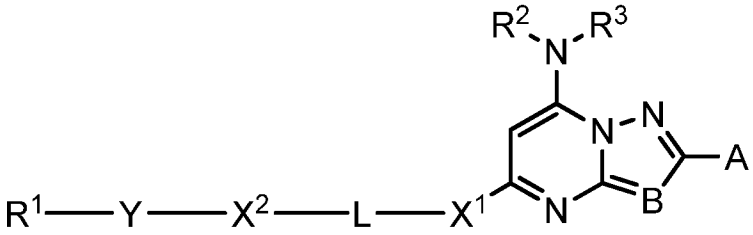
Amendments to the Claims

1. (Previously Presented) A compound of the following formula:



(I)

or a pharmaceutically acceptable salt or N-oxide thereof;

wherein

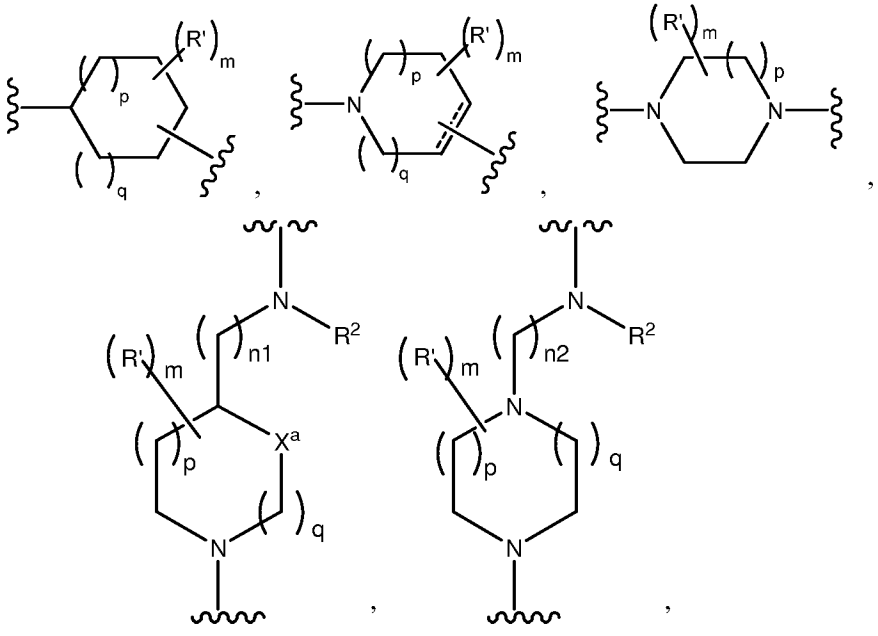
A is 2-furanyl;

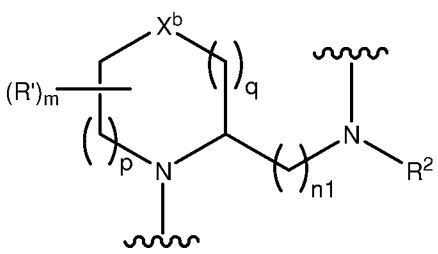
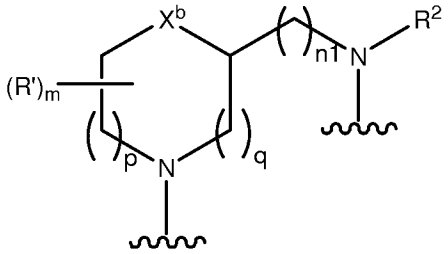
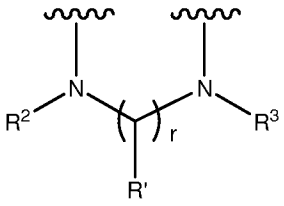
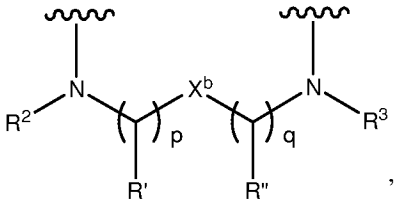
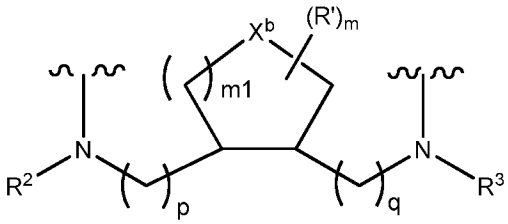
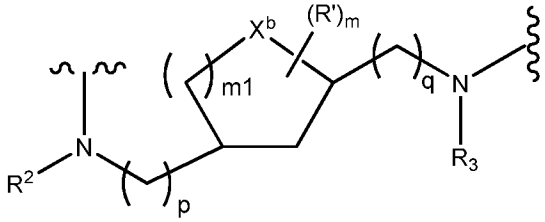
B is N;

each of R^2 and R^3 is independently hydrogen or alkyl;

each of X^1 and X^2 is independently, C_{1-6} alkylene, C_{2-6} alkenylene, C_{2-6} alkynylene or a bond;

L is a bond or a linker selected from the group consisting of:




,

,

,

,

, and

;

wherein:

each of R' and R", independently, is hydrogen, alkyl, alkenyl, alkynyl, alkoxy, acyl, halo, hydroxy, amino, nitro, oxo, thioxo, cyano, guanadino, amidino, carboxy, sulfo, sulfoxy, mercapto, alkylsulfanyl, alkylsulfinyl, alkylsulfonyl, aminocarbonyl, alkylcarbonylamino, alkylsulfonylamino, alkoxycarbonyl, alkylcarbonyloxy, urea, thiourea, sulfamoyl, sulfamide, carbamoyl, cycloalkyl, cycloalkyloxy, cycloalkylsulfanyl, heterocycloalkyl, heterocycloalkyloxy, heterocycloalkylsulfanyl, aryl, aryloxy, arylsulfanyl, aroyl, heteroaryl, heteroaryloxy, heteroarylsulfanyl, or heteroaroyl; provided that two adjacent R' groups can join together to form a 4- to 8-membered optionally substituted cyclic moiety;

X^a is $-C(R^2)(R^3)-$, -S-, -SO-, or $-SO_2-$;

X^b is $-C(R^2)(R^3)-$, $-NR^2-$, -O-, -S-, -SO-, or $-SO_2-$;

each of p, q, m and m1, independently, is 0-3;

r is 1 or 2;

n1 is 0-6; and

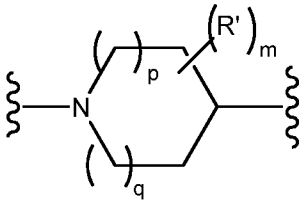
n2 is 2-6;

Y is $-C(R^2)(R^3)-$, -O-, -S-, -SO-, $-SO_2-$, -CO-, $-CO_2-$, or a bond; and

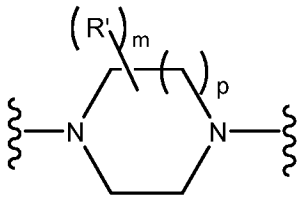
R^1 is alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, aralkyl, heterocyclyl, or heterocycloalkyl;

provided that

(1) when each of X^1 is a bond and L is a 4- to 6-membered saturated heterocyclic group selected from the group consisting of:



and

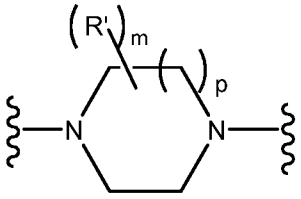


, then X^2 is alkylene and R^1 is heteroaryl, and

(2) when L is a bond, X^1 is an alkynylene.

2. (Original) The compound of claim 1, wherein X^1 is C_{2-6} alkynylene.

3. (Previously Presented) The compound of claim 2, wherein L is



or a bond.

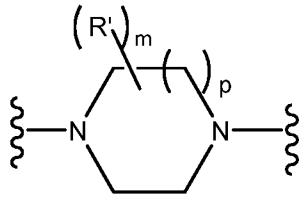
4. (Original) The compound of claim 2, wherein X^2 is C_{1-4} alkylene or a bond.

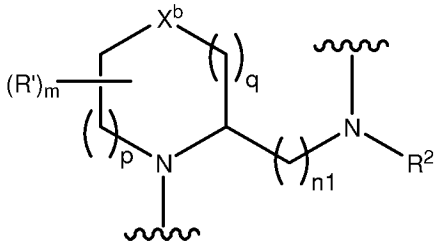
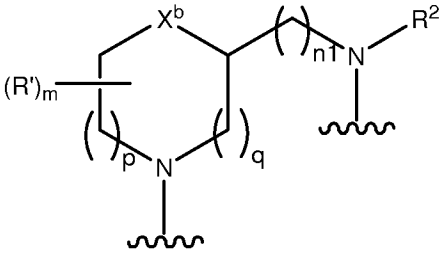
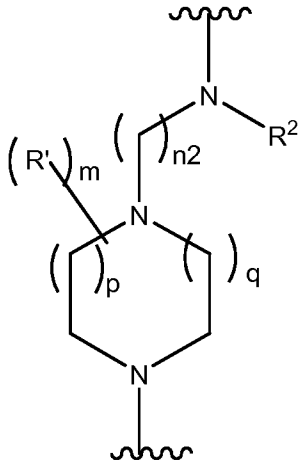
5. (Original) The compound of claim 2, wherein Y is a bond.

6. (Canceled)

7. (Original) The compound of claim 2, wherein R^1 is alkyl, cycloalkyl, aryl, heterocycloalkyl, or heteroaryl.

8. (Original) The compound of claim 7, wherein R^1 is optionally substituted with alkyl, halo, hydroxy or phenyl.

9. (Currently Amended) The compound of claim 2, wherein L is  or a bond; X^2 is C_{1-4} alkylene or a bond; Y is a bond; and R^1 is alkyl, cycloalkyl, aryl, heterocycloalkyl, or heteroaryl, each of which being optionally substituted with alkyl, halo, hydroxy, or phenyl~~; and B is N~~.

10. (Original) The compound of claim 1, wherein L is  ,  , or  .

11. (Original) The compound of claim 10, wherein X^b is $-C(R^2)(R^3)-$ or $-NR^2-$.

12. (Original) The compound of claim 11, wherein X^b is $-C(R^2)(R^3)-$.

13. (Original) The compound of claim 12, wherein p is 0-1 and q is 1.

14. (Original) The compound of claim 13, wherein n1 is 1-4 and n2 is 2-4.

15. (Original) The compound of claim 14, wherein X^1 is C_{1-6} alkylene or a bond.

16. (Original) The compound of claim 14, wherein X^2 is C_{1-6} alkylene or a bond.

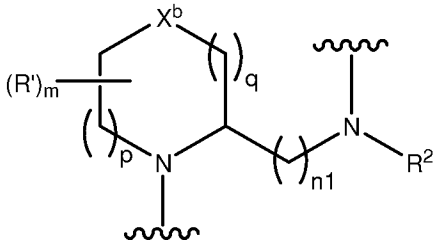
17. (Original) The compound of claim 14, wherein Y is $–SO_2-$, -CO-, $-CO_2-$, or a bond.

18. (Canceled)

19. (Original) The compound of claim 14, wherein R^1 is aryl or heteroaryl, each of which being optionally substituted with alkyl, halo, hydroxy, or phenyl.

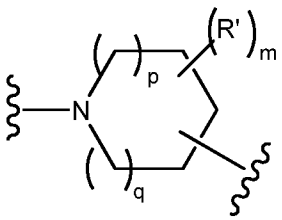
20. (Previously Presented) The compound of claim 14, wherein each of X^1 and X^2 is independently C_{1-6} alkylene or a bond; Y is $–SO_2-$, -CO-, $-CO_2-$, or a bond; and R^1 is aryl or heteroaryl, each of which being optionally substituted with alkyl, halo, hydroxy, or phenyl.

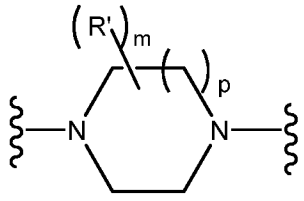
21. (Currently Amended) The compound of claim 14, wherein L is

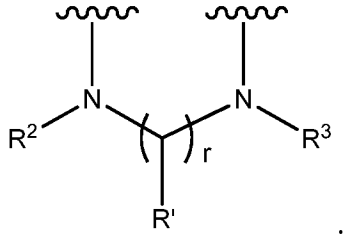


.; X^1 is a bond, X^2 is C_{1-4} alkylene; Y is a bond; and R^1 is aryl or heteroaryl, each of which being optionally substituted with alkyl, halo, hydroxy, or phenyl~~; and B is N~~.

22. (Original) The compound of claim 1, wherein L is



, 

, or 

.

23. (Original) The compound of claim 22, wherein X^1 is C_{1-6} alkylene, C_{2-6} alkynylene, or a bond.

24. (Original) The compound of claim 22, wherein X^2 is C_{1-6} alkylene or a bond.

25. (Original) The compound of claim 22, wherein Y is $–SO_2$-, -CO-, $-CO_2$-, or a bond.

26. (Canceled)

27. (Original) The compound of claim 22, wherein R^1 is alkyl, cycloalkyl, aryl, heterocycloalkyl, or heteroaryl.

28. (Original) The compound of claim 27, wherein R^1 is optionally substituted with alkyl, halo, hydroxy or phenyl.

29. (Currently Amended) The compound of claim 22, wherein X^1 is C_{1-6} alkylene, C_{2-6} alkynylene, or a bond, X^2 is C_{1-6} alkylene or a bond; Y is $–SO_2$-, -CO-, $-CO_2$-, or a bond; and R^1 is alkyl, cycloalkyl, aryl, heterocycloalkyl, or heteroaryl, each of which is being optionally substituted with alkyl, halo, hydroxy, or phenyl~~; and B is N~~.

30. (Original) The compound of claim 1, said compound being

2-furan-2-yl-N^5-[1-(5-methyl-isoxazol-3-ylmethyl)-pyrrolidin-2-ylmethyl]-[1,2,4]triazolo[1,5-a]pyridmidine-5,7-diamine;

2-furan-2-yl-N^5-methyl-N^5-[1-(5-methyl-isoxazol-3-ylmethyl)-pyrrolidin-2-ylmethyl]-[1,2,4]triazolo[1,5-a]pyridmidine-5,7-diamine;

N^5-[1-(2,5-difluoro-benzyl)-pyrrolidin-2-ylmethyl]-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

5-{3-[4-(2,4-difluoro-phenyl)-piperaziny-1-yl]prop-1-ynyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

5-{3-[4-(2,4-difluoro-phenyl)-piperaziny-1-yl]propyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

5-{3-[4-(2,4-difluoro-phenyl)-piperaziny-1-yl]ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-5,7-diamine;

N^5-{2-[4-(2,4-difluoro-phenyl)-piperaziny-1-yl]ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

2-furan-2-yl-N^5-(1-furan-2-ylmethyl-pyrrolidin-2-ylmethyl)-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-[1-((2-fluorobenzyl)-pyrrolidin-2-ylmethyl)-2-furan-2-yl]-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-(1-pyridin-2-ylmethyl-pyrrolidin-2-ylmethyl)-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-(1-pyridin-4-ylmethyl-pyrrolidin-2-ylmethyl)-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-(1-(2,3,6-trifluorobenzyl)-pyrrolidin-2-ylmethyl)-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-[1-(2-chloro-pyridin-4-ylmethyl)-pyrrolidin-2-ylmethyl)-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

1-(7-amino-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-5-ylethynyl)-cyclopentanol;

1-(7-amino-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-5-ylethynyl)-cyclohexanol;

2-furan-2-yl-N^5-{2-[4-(2,4,6-trifluorophenyl)-piperaziny-1-yl]-ethyl}-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(2,3-difluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-{2-[4-(3,4,5-trifluorophenyl)-piperazin-1-yl]-ethyl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-{2-[4-(2,3,6-trifluorophenyl)-piperazin-1-yl]-ethyl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(3,5-difluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(2,6-difluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(2,5-difluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(2-fluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(4-fluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(3,5-dichlorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-{2-[4-(2,3,4-trifluorophenyl)-piperazin-1-yl]-ethyl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-{2-[4-(2,4,5-trifluorophenyl)-piperazin-1-yl]-ethyl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine; and

N^5-{2-[4-(4-chloro-2-fluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine. [[;]]

31. (Original) The compound of claim 1, said compound being

2-furan-2-yl-N^5-[1-(5-methyl-isoxazol-3-ylmethyl)-pyrrolidin-2-ylmethyl]-[1,2,4]triazolo[1,5-a]pyridmidine-5,7-diamine;

2-furan-2-yl-N^5-methyl-N^5-[1-(5-methyl-isoxazol-3-ylmethyl)-pyrrolidin-2-ylmethyl]-[1,2,4]triazolo[1,5-a]pyridmidine-5,7-diamine;

2-furan-2-yl-N^5-(1-furan-2-ylmethyl-pyrrolidin-2-ylmethyl]-[1,2,4]triazolo[1,5-a]pyridmidine-5,7-diamine;

N^5-[1-(2,5,-difluoro-benzyl)-pyrrolidin-2-ylmethyl]-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-(1-(2,3,6-trifluorobenzyl)-pyrrolidin-2-ylmethyl)-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-[1-(2-chloro-pyridin-4-ylmethyl)-pyrrolidin-2-ylmethyl)-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

1-(7-amino-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-5-ylethynyl)-pentanol;

1-(7-amino-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-5-ylethynyl)-cyclohexanol;

5-(3-cyclohexyl-prop-1-ynyl)-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

5-{3-[4-(2,4-difluoro-phenyl)-piperaziny-1-yl]prop-1-ynyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

N^5-{2-[4-(2,4-difluoro-phenyl)-piperziny-1-yl]ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

2-furan-2-yl-N^5-{2-[4-(2,4,6-trifluorophenyl)-piperaziny-1-yl]-ethyl}-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(2,3-difluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

2-furan-2-yl-N^5-{2-[4-(2,3,6-trifluorophenyl)-piperazin-1-yl]-ethyl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(2-fluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(4-fluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(3,5-dichlorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine; and

2-furan-2-yl-N^5-{2-[4-(2,3,4-trifluorophenyl)-piperazin-1-yl]-ethyl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine.

32. (Original) The compound of claim 1, said compound being

2-furan-2-yl-N^5-[1-(5-methyl-isoxazol-3-ylmethyl)-pyrrolidin-2-ylmethyl]-[1,2,4]triazolo[1,5-a]pyridmidine-5,7-diamine;

2-furan-2-yl-N^5-methyl-N^5-[1-(5-methyl-isoxazol-3-ylmethyl)-pyrrolidin-2-ylmethyl]-[1,2,4]triazolo[1,5-a]pyridmidine-5,7-diamine;

N^5-[1-(2,5-difluoro-benzyl)-pyrrolidin-2-ylmethyl]-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

5-(3-cyclohexyl-prop-1-ynyl)-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

5-{3-[4-(2,4-difluoro-phenyl)-piperaziny-1-yl]prop-1-ynyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

N^5-{2-[4-(2,4-difluoro-phenyl)-piperziny-1-yl]ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;

2-furan-2-yl-N^5-{2-[4-(2,4,6-trifluorophenyl)-piperaziny-1-yl]-ethyl}-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(2-fluorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine;

N^5-{2-[4-(3,5-dichlorophenyl)-piperazin-1-yl]-ethyl}-2-furan-2-yl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine; and

2-furan-2-yl-N^5-{2-[4-(2,3,4-trifluorophenyl)-piperazin-1-yl]-ethyl-[1,2,4]triazolo[1,5-a]pyrimidine-5,7-diamine.

33. (Original) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

34. (Original) A pharmaceutical composition comprising a compound of claim 30 and a pharmaceutically acceptable carrier.

35-46. (Canceled)

47. (Previously Presented) The compound of claim 10, wherein X^1 is C_{1-6} alkylene, C_{2-6} alkynylene or a bond.

48. (Currently Amended) The compound of claim 47, wherein R^2 is hydrogen ~~or alkyl~~.

49. (Previously Presented) The compound of claim 48, wherein X^2 is C_{1-6} alkylene or a bond.

50. (Previously Presented) The compound of claim 49, wherein Y is $–SO_2-$, -CO-, $-CO_2-$, or a bond.

51. (Previously Presented) The compound of claim 50, wherein R^1 is alkyl, cycloalkyl, aryl, heterocycloalkyl, or heteroaryl.

52. (Currently Amended) The compound of claim 51, wherein R^1 is a substitued aryl ~~(e.g., 2,4-difluorophenyl)~~.

53. (Previously Presented) The compound according to claim 10, wherein X^1 is C_{1-6} alkylene, C_{2-6} alkynylene or a bond; Y is $–SO_2-$, -CO-, $-CO_2-$, or a bond; R^1 is alkyl, cycloalkyl, aryl, heterocycloalkyl, or heteroaryl; and X^2 is C_{1-6} alkylene or a bond.

54. (New) The compound according to claim 52, wherein R^1 is 2,4-difluorophenyl.